

B. Rejection of the Claims under 35 U.S.C. § 103

Claims 25-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over Re27,610 to Rausing et al. Applicant respectfully requests reconsideration of this rejection because Applicant's invention is not obvious in view of this reference.

Applicant's invention is directed to a **co-extruded** polymer coated sheet material. Specifically, Applicant uses a cellulosic substrate upon which polypropylene is co-extruded with at least one additional polymer, such as polyethylene. The polymers are co-extruded onto the substrate so that the molten polypropylene layer is adjacent the surface of the substrate and is sandwiched between the substrate and the second polymer layer (page 3, lines 19-28 of the specification). The resulting multi-layer sheet material exhibits good interlaminar bonding such that the adhesive strength between the polypropylene polymer layer and the substrate is greater than the cohesive strength of the cellulosic substrate, avoiding delamination (page 4, lines 10-17 of the specification).

Rausing et al., on the other hand, disclose a packaging material having three lamination layers, with the base material being paper, and the inner layer and intermediate layer being a thermoplastic material (col. 1, lines 24-29). Polypropylene can be used for the intermediate layer, and polyethylene for the inner layer, which is intended for heat sealing (col. 1, lines 53-55). Rausing et al. manufacture the packaging material by extruding the first plastic film onto the base material, and then calendering the laminate. From a second extrusion nozzle, the second plastic film is extruded, and the three layer laminate is calendered between a second pair of rolls (col. 2, lines 61-72). The layers are heat sealed together, wherein the inner layer (polyethylene) melts, and the intermediate layer (polypropylene) remains unmelted, thereby preventing the material from one layer from being pressed into the base material layer (col.1, lines 37-46 and col. 3, claim1).

Rausing et al. do not teach Applicant's invention. Applicant describes and claims **co-extruding** the polymer layers onto the substrate. Rausing et al. do not teach or suggest co-extrusion of the polymer layers. There is no teaching or suggestion in Rausing et al. that the polymer layers are co-extruded together. Further, Rausing et al. describe and claim that the "layers are prevented from being pressed into each other" (col. 3, lines 23-24 of claim 1 and col.

1, lines 37-46). In Applicant's invention, the polymers are co-extruded onto a support substrate so that the molten polypropylene layer is adjacent the substrate. The resulting multi-layer sheet material exhibits good interlaminar bonding, and an adjacent layer, such as a silicone release layer, is shielded from migration of additives from polypropylene. The heating and calendaring process and the resulting product of Rausing et al. are distinct from the co-extruded, molten polypropylene layer of the present invention. Thus, Applicant's invention is not obvious in view of Rausing et al.

Claims 25-43 are also rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 4,859,511 to Patterson et al., in view of Rausing et al., described above, and U.S. Patent No. 4,855,187 to Osgood, Jr. et al.

At the outset, the references individually do not teach Applicant's invention, and there is no motivation to combine these references. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the modification suggested by the Examiner. That knowledge cannot come from the Applicant's invention itself. *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992). Further, "the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992). Thus, modification of Patterson et al. in view of Rausing et al. and Osgood et al. in a manner that apparently reconstructs Applicant's invention is improper and insufficient to present a *prima facie* case of obviousness.

Patterson et al. disclose release sheets that include a support substrate having a release layer formed on at least one side thereof with an undercoating layer interposed between the support substrate and the release layer (col. 2, lines 3-6). Suitable support substrates include polymeric films, and paper extrusion-coated with polyolefins (col. 2, lines 39-44). Patterson et al. further include an undercoat layers consisting essentially of hydrocarbon materials having low polar surface energy and low modulus of elasticity (col. 2, lines 6-9). The teaching of Patterson et al. is distinct from Applicant's invention. Notably, Patterson et al. do not teach the multilayer film formed from co-extruding polypropylene and polyethylene onto a substrate, as taught and

claimed by Applicant. This distinction is likewise noted by the Examiner. Further, Applicant does not incorporate an undercoat layer as in Patterson et al. Applicant's resulting product is distinguishable from Patterson et al.

Osgood et al. discloses polypropylene films. Applicant discloses a co-extruded polymer coated substrate, which is completely different from the polypropylene film of Osgood et al. As with the prior references, Osgood et al. do not teach or suggest a polymers co-extruded onto a substrate, and thus, Osgood et al. do not teach or suggest Applicant's invention.

As previously discussed, Rausing et al. disclose a multi-layer packaging material, wherein the polymer layers are individually extruded, one at a time, and then calendered together. Rausing et al., however, do not teach or suggest **co-extruding** multiple polymer layers onto a substrate, as described and claimed in Applicant's invention. Thus, Rausing et al. fail to teach or suggest Applicant's invention. Given the distinct differences in the references as presented above, and the fact that each of the references discloses a different product and process as described and claimed by Applicant, negates any motivation to combine the references. Further, the addition of Patterson et al. and Osgood et al. does not overcome the previously discussed deficiencies of Rausing et al. to render Applicant's invention obvious.

Even if the references were properly combined, Applicant's invention is still not obvious in view of the combination of references. Applicant's invention is a multilayered structure including a cellulosic substrate with a co-extruded polymeric layer on the surface thereof. Rausing et al. was distinguished from Applicant's invention. The addition of Patterson et al. and Osgood et al. do not overcome the deficiencies of Rausing et al. None of the references, alone or in combination, teach or suggest Applicant's invention. Applicant respectfully requests that the rejection under §103 be withdrawn.

Conclusion

In view of the amendments and arguments presented above, Applicant respectfully submits that Claims 25-43 are now in condition for allowance, and such action is respectfully requested.

Respectfully submitted

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